Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet 1 of 3

| Confirmation Number | 9839 |
|------------------------|-------------------------|
| Application Number | 10/599497 |
| Filing Date | September 29, 2006 |
| First Named Inventor | P.J.L. Quaedflieg et al |
| Group Art Unit | 1625 |
| Examiner Name | N.S. Chandrakumar |
| Attorney Docket Number | TIP0060USPCT |

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite | | d Code ² f known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document mm-dd-yyyy | Pages, Columns, Lines, where relevant passages or relevant figures appear |
|----------------------|------|------------|---------------------------------|---|--|---|
| /N.C | ./ | US6127372A | | Tung et al. | 10/3/2000 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | Foreign | Patent Document | | Name of Patentee or | Date of Publication of Cited Document | Pages, Columns, Lines, where relevant | |
|---|--------------------------|---------------------|--------------------------|-------------------|--|--|---------------------------------------|-----------------------|
| Examiner Initials | Cite No. ¹ | Office ³ | Number ⁴ Kind | Code ⁵ | Applicant of Cited Document | mm-dd-yyyy passages or relevant figures appear | | T ⁶ |
| , /N | .C./ | EP | 715618 | B1 | G.D. SEARLE & CO. THE MONSANTO COMPANY | 6/12/1996 | | |
| Мандоорр | | wo | 2003022853 | B 1 | TIBOTEC PHARMACEUTICALS LTD. | 3/20/2003 | | |
| DOCOCOSCOSOCIO | | wo | 1995024385 | A1 | VERTEX PHARMACEUTICALS INCORPORATED | 9/14/1995 | | |
| Опрособрания | | wo | 1999065870 | A2 | VERTEX PHARMACEUTICALS INCORPORATED | 12/23/1999 | | |
| *************************************** | | wo | 1999065870 | А3 | VERTEX PHARMACEUTICALS INCORPORATED | 3/15/2001 | | |
| BOOLOOGO COOLOGO | | wo | 2000047551 | A2 | VERTEX PHARMACEUTICALS INCORPORATED | 8/17/2000 | | |
| | | wo | 2000047551 | A3 | VERTEX PHARMACEUTICALS INCORPORATED | 8/16/2001 | | |
| V/N | .C./ | wo | 2000076961 | A1 | VERTEX PHARMACEUTICALS INCORPORATED | 12/21/2000 | | |

| Examiner Signature | /Nizal Chandrakumar/ | Date Considered | 05/12/2000 |
|-----------------------|----------------------|--------------------|--------------------|
| | | | U.S. P.S. E. G.G.G |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)
Sheet 2 of 3

| _ | a to respond to a concensin of final material and so it displaye a valid of the control number. | | | | |
|---|---|-------------------------|--|--|--|
| | Confirmation Number | 9839 | | | |
| ı | Application Number | 10/599497 | | | |
| ı | Filing Date | September 29, 2006 | | | |
| ı | First Named Inventor | P.J.L. Quaedflieg et al | | | |
| ı | Group Art Unit | 1625 | | | |
| | Examiner Name | N.S. Chandrakumar | | | |
| | Attorney Docket Number | TIP0060USPCT | | | |
| - | | | | | |

U.S. PATENT DOCUMENTS

| | | U.S. Patent Do | cument | | Date of Publication | Pagas Calumna Linas |
|----------------------|--------------------------|----------------|--------------------------------------|---|------------------------------|---|
| Examiner Initials | Cite No. ¹ | Number | Kind Code ² (if known) | Name of Patentee or Applicant of Cited Document | of Cited Document mm-dd-yyyy | Pages, Columns, Lines, where relevant passages or relevant figures appear |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | Foreign | Patent Document | | Name of Patentee or | Date of Publication of | Pages, Columns, Lines, where | |
|-----------------------------|-------------|---------|-----------------|----------------|---|---------------------------------|--|----------------|
| Examiner Cite Initials No.1 | | 2 | | e ⁵ | Applicant of Cited Document | Cited Document mm-dd-yyyy | relevant passages or relevant figures appear | T ⁶ |
| /N.C | 5. / | wo | 2001025240 | A1 | THE GOVERNMENT OF THE UNITED STATES OF AMERICA, represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES; NATIONAL INSTITUTES OF HEALTH | 4/12/2001 | | |
| /N.C |)./ | wo | 1999067417 | A2 | THE UNITED STATES OF AMERICA, represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES | 12/29/1999 | | |
| | /N.C. | wo | 1999067417 | A3 | None | 9/28/2000 | | |

| Examiner Signature | /Nizal Chandrakumar/ | Date Considered | 05/13/2009 |
|-----------------------|----------------------|--------------------|---------------|
| Signature | | Considered | 00, 10, 11000 |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

possible. s Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet 3 of 3

| to respond to a concension of whether an issent a replaye a valid of the control frame | | | | | |
|--|-------------------------|--|--|--|--|
| Confirmation Number | 9839 | | | | |
| Application Number | 10/599497 | | | | |
| Filing Date | September 29, 2006 | | | | |
| First Named Inventor | P.J.L. Quaedflieg et al | | | | |
| Group Art Unit | 1625 | | | | |
| Examiner Name | N.S. Chandrakumar | | | | |
| Attorney Docket Number | TIP0060USPCT | | | | |

| Examiner's | Cite | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), | T^2 |
|-----------------|------------------|---|-------|
| nitials* | No. ¹ | publisher, city and/or country where published Ghosh, et al "Potent HIV Protease Inhibitors Incorporating High-Affinity P2-Ligands and (R- | |
| /NLO-/ | | Hydroxyethylamino) Sulfonamide Isostere''', Bioorganic & Medicinal Chemistry Letters , Oxford | |
| /N.C./ | | GB, Volume 8, No. 6, March 17, (1998) pp. 687-690. | |
| | | Ghosh et al., "Nonpeptidal P2 Ligands for HIV protease Inhibitors; Structure Based Design, | |
| 92000000 | | Synthesis, and Biological Evaluation "J. Med. Chem. (1996) Volume 39, pp. 3278-3290 | |
| | | Pezeck et al., "A New Route to Perhydro and Tetrahydro Furo-2, 3b Furans Via Radical | |
| 2466666 | | Cyclisation", Tetrahedron Letters, (1986) Volume 27, No. 32, pp. 3715-3718 | |
| | | Uchiyama et al., "Stereoselevtive synthesis of optically active perhydrofurol [2,3-b] furan | |
| 9000000 | | derivatives", Tetrahedron Letters, (2001), Vol. 42, pp. 4653-4656 | |
| | | C. Hubschwerlen, "A convenient Syntesis of L-(s) Glyceraldehyde Acetonide form L-Ascorbiic | |
| Via September 1 | | Acid", Synthesis (1986) pp. 962-964 | |
| | | C.R. Schmid et al., "Synthesis of 2,3 O Isopropylidene glyceraldehyde High Chemical and | |
| 200000 | | Optical Purity: Observation on the Development of a Practical Bulk Process", J. Org. Chem. | |
| March | | (1991), Volume 56, pp. 4056-4058 | |
| | | Krief et al., "Diastereoselective Synthesis of Dimethyl Cycloropane-1, 1-Dicarboxylates from | |
| | | a y-Alkosy Alkylidene Malonate and Sulfer and Phosphorus Ylides", Tetrahedron Lett. 1998, | |
| 9000000 | | 39, 1437-1440 | |
| | | N. Kornblum "The Synthesis of Aliphatic and Nitro Compounds", Organic reactions, (1962), | |
| V | | Volume 12, 101 | |
| /N.C./ | | H.W. Pinnick, Organic Reactions (1990), Vol. 38, pp. 655-792 | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Examiner | /Nizal Chandrakumar/ | Date | 0511010000 |
|-----------|----------------------|------------|------------|
| Signature | /Nizai Onandiakumai/ | Considered | 05/13/2009 |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450